

# List of All Chemicals

## P **Zizyphus vulgaris**

Variety

spinosus

Variety author

BUNGE.

How used

Food

\*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

Chemical	Plant Part	Low PPM	High PPM	StdDev	*Reference
BETULINIC-ACID	Seed	--	--		Pavannasasivam, G., & M.U.S. Sultanbawa. 1974. Betulinic acid in the Dilleniaceae and a review of its natural distribution. Phytochem. 13:2002-2006.

### Activities (22)

Anthelmintic

AntiHIV EC50=2.0 ug/ml

Kashiwada, Y., et al. 1998. Anti-AIDS Agents. 30. Anti-HIV Activity of Oleanolic Acid, Pomolic Acid, and Structurally Related Triterpenoids. J. Nat. Prod., 61 (9): 1090-1095.

AntiHIV IC50=6.5 ug/ml

AntiHIV 14.8 uM

Antibacterial

Anticancer

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Anticarcinomic

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Antiedemic

Antiinflammatory

Recio, M., et al. 1994. Investigations on the Steroidal Anti-Inflammatory Activity of Triterpenoids from *Diospyros leucomelas*\*. Planta Medica, 61: 9.

Antileukemic

Antimalarial IC50=19-26 ug/ml

New York Times, 3/28/95.

Antimelanomic

Antinociceptive

Antiplasmoidal IC50=19-26 ug/ml

Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.

Antitumor

Antiviral 14.8 uM

Apoptotic

Cytotoxic 50-100 ppm

Biosyn. Prod. Cancer Chemotherapy (Petit et al)

Cytotoxic 16.4 uM

Phospholipase-A2-Inhibitor

Prostaglandin-Synthesis-Inhibitor 200 ug/ml

Dunstan, C. A., Liu, B., Welch, C. J., Perera, P., Bohlin, L. 1998. Alphitol, a Phenolic Substance from *Alphitonia zizyphoides* which Inhibits Prostaglandin Biosynthesis in vitro. Phytochemistry, 48(3): 495-497.

Prostaglandin-Synthesis-Inhibitor IC50=101 uM

Huang, C., Tunon, H., Bohlin, L. 1995. Anti-Inflammatory Compounds Isolated from *Menyanthes trifoliata* L. Yao Hsueh Hsueh Pao, 30(8): 621-626.